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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,250	06/05/2001	Yuichi Matsumoto	35.C15419	5978
5514	7590	04/05/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			SHANNON, MICHAEL R	
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			2614	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/873,250	MATSUMOTO ET AL.
	Examiner	Art Unit
	Michael R Shannon	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 05 June 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 June 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20010910</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nortrup et al (USPN 4,626,892), cited by examiner, in view of Darbee et al (USPN 5,959,751), cited by examiner.

Regarding claim 1, the Nortrup reference meets the claimed "image processing apparatus" as follows:

- The claimed "image input means for inputting an image signal relating to a television broadcast" is met by the RF Input 1 [Fig. 1].
- The claimed "menu generation means for generating a menu image signal representing an operation menu relating to processing of the image signal and having a plurality of menu portions at different hierarchical levels each including at least one menu item" is met by On-Screen Character Generator 65 [Fig. 1], which serves to display a menu such as that found in 006 of Figure 4b, with selectable hierarchical structure in order to display more menus such as those in 013 of Figure 4d, 020 in Figure 4e, 026 in Figure 4g, etc., all for adjusting the operation and display of the image signal.

- The claimed "display control means for displaying on a display unit an image corresponding to the image signal output from said image input means and the operation menu corresponding to the menu image signal generated by said menu generation means" is met by the display of the function control instructions with the normal image for display together on the display device [col. 3, line 66 – col. 4, line 10].
- The claimed "instruction input means for receiving an instruction from an operating unit including a plurality of function keys and selection means for selecting a desired item in the operation menu displayed on said display unit" is met by the remote control receiver and demodulator 57 [Fig. 1], which serves to receive a selection by the user for on-screen functions through the use of keys on the remote control 55 [Fig. 1].

The Nortrup reference does not teach the "assignment means for assigning, according to a predetermined operation by the operating unit, a function according to one item selected by said selection means from the items in the operation menu displayed on said display unit to one of said plurality of function keys; and control means for controlling, in response to said operation of the function key, said image input means to execute processing corresponding to the function assigned to said function key by said assignment means". However, the Darbee reference teaches the aforementioned assignment means and control means as follows:

- The claimed "assignment means for assigning, according to a predetermined operation by the operating unit, a function according to one

item selected by said selection means from the items in the operation menu displayed on said display unit to one of said plurality of function keys" is met by the "DO" command macro, which can assign macros to certain function keys on the remote controller [col. 13, lines 13-17].

- The claimed "control means for controlling, in response to said operation of the function key, said image input means to execute processing corresponding to the function assigned to said function key by said assignment means" is met by the execution of the macro command upon actuation of the function key to carry out the pre-determined and assigned function [col. 13, lines 18-20].

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the assignment and control means for operating the definable function (macro) keys, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 2, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 1. The Nortrup reference does not teach that the "menu generation means further generates a registration menu image signal representing a registration menu having a plurality of items corresponding to said plurality of function keys, and outputs the registration menu image signal to said display control means". The Darbee reference teaches the use of colored lights and display of blinking lights in order to indicate to the user which functions (macros) are assigned to which keys on the remote control [col. 13, lines 25-34]. This allows the user to

recognize functions and to assign functions to programmable function keys accordingly [col. 13, lines 13-17]. It would have been obvious to one of ordinary skill in the art at the time of the invention to allow the user to program the macro keys through the OSD, in order to allow for easy recognition of function key assignments with the ability to perform the functions required of several buttons to achieve a specific function.

Regarding claim 3, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 2. Neither the Nortrup nor Darbee reference teach that the “menu generation means generates said registration menu image signal so that said registration menu is displayed adjacent to said operation menu”. The Nortrup reference simply states that “the user does not have to interrupt viewing a program during the control of other functions”, however, is silent as to the placement of the “other functions”. The Examiner takes Official Notice that it is notoriously well known in the art to place menus on the screen so as not to interfere with the video signal and/or to make them appear as “pop-ups” directly adjacent to the parent menu. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time of the invention to place the registration menu adjacent to the operation menu, in order to allow for an intuitive interface with a hierarchical type menu structure.

Regarding claim 4, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 2. The Nortrup reference does not teach that the “selection means is also capable of selecting one of the items in said registration menu as desired, and said assignment means assigns the function corresponding to the item

selected from said operation menu by said selection means to one of the function keys corresponding to the item selected from the registration menu by said selection means". The Darbee reference teaches that the "DO" command can be used to select a function (macro) key that can be used to execute a specific user-defined function [col. 13, lines 13-17]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the selection means for defining function (macro) keys, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 5, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 2. The Nortrup reference does not teach that the "assignment means performs said assignment operation according to the key operation performed by said operating unit to determine one of the items in said registration menu as desired". The Darbee reference teaches that the "DO" command can be used to select a function (macro) key that can be used to execute a specific user-defined function [col. 13, lines 13-17]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the selection means for defining function (macro) keys, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 6, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 2. Neither the Nortrup nor Darbee reference teaches that the "assignment means performs said assignment operation in response to the absence of any operation by said operating unit during a predetermined time

period". The Darbee reference simply discusses the assignment of the function (macro) key according to use selection and programming through physical selection of the button. The examiner takes Official Notice that it is notoriously well known in the art to make default settings after a certain time period of inactivity. Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time of the invention to enable the function (macro) key to be assigned by default if no key selection is made within a pre-determined time period. This would have been useful in allowing users to continue operation of the macro assignment functions as disclosed, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 7, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 1. The Nortrup reference further discloses that the lowest level menu items can be used to control the video signal [col. 7, lines 27-35]. The Nortrup reference, does not however, disclose that the "assignment means assigns the function corresponding to the item selected from said operation menu by said selection means to one of the function keys corresponding to the item selected from the menu items at the lowest level by said selection means". The Darbee reference discloses the "DO" command macro, which can assign macros to certain function keys on the remote controller [col. 13, lines 13-17]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the assignment and control means for operating the definable function (macro) keys, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 8, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 1. The Nortrup reference further teaches that the claimed "control means controls said control object in order to execute the function corresponding to the item selected by said selection means from the operation menu displayed on said display unit". The claim is met by the remote control ADJ- and ADJ+ buttons, which are used with the hierarchical menu selections in order to execute the functions corresponding to the selected item [col. 7, lines 27-35].

Regarding claim 9, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 1. The Nortrup reference further teaches that the "operating unit comprises a remote control device". The claim is met by the remote control 55 [Fig. 1].

Regarding claim 10, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 1. The Nortrup reference further teaches that the "menu generation means includes a storage unit for storing image data representing said operation men". The claim is met by the EROM 75, which serves to store data for various functions and characteristics to be controlled by the remote control [col. 4, line 64 – col. 5, line 37].

Regarding claim 11, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 1. The Nortrup reference further teaches that the "menu generation means includes a storage unit for storing character code data and font data representing said operation menu". The claim is met by the EROM 75, which

serves to store data for various functions and characteristics to be controlled by the remote control [col. 4, line 64 – col. 5, line 37].

Regarding claim 12, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 1. The Nortrup reference does not teach that the “assignment means includes a memory for storing code data representing functions assigned to said plurality of function keys”. The Darbee reference does disclose a RAM that can store function codes associated with pushbuttons and macro buttons [col. 13, lines 29-35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the RAM for storage of code data, in order to use macro keys to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 13, the Nortrup and Darbee references teach all of that which is discussed above with regards to claim 1. The Nortrup reference further teaches that the “display control means synthesizes a combined image signal by combining the image signal output from said image input means and the menu image signal generated by said menu generation means, and displays an image corresponding to said combined image signal on the display unit”. The claim is met by the display of the function control instructions with the normal image for display together on the display device [col. 3, line 66 – col. 4, line 10].

Regarding claim 14, the Nortrup reference meets the claimed “signal processing apparatus” as follows:

- The claimed “signal input means for inputting an image signal and an audio signal relating to a television broadcast” is met by the RF-Input 1 [Fig. 1].
- The claimed “menu generation means for generating a menu image signal representing an operation menu relating to processing of the audio signal and having a plurality of menu portions at different hierarchical levels each including at least one menu item” is met by On-Screen Character Generator 65 [Fig. 1], which serves to display a menu such as that found in 006 of Figure 4b, with selectable hierarchical structure in order to display more menus such as those in 013 of Figure 4d, 020 in Figure 4e, 026 in Figure 4g, etc., all for adjusting the operation and display of the image signal.
- The claimed “audio output means for outputting, to an audio monitor, sound relating to the audio signal output from said signal input means” is met by the Audio Processor 35 and Speakers 45 and 47 [Fig. 1].
- The claimed “display control means for displaying on a display unit an image corresponding to the image signal output from said signal input means and the operation menu corresponding to the menu image signal generated by said menu generation means” is met by the display of the function control instructions with the normal image for display together on the display device [col. 3, line 66 – col. 4, line 10].

- The claimed “instruction input means for receiving an instruction from an operating unit including a plurality of function keys and selection means for selecting a desired item in the operation menu displayed on said display unit” is met by the remote control receiver and demodulator 57 [Fig. 1], which serves to receive a selection by the user for on-screen functions through the use of keys on the remote control 55 [Fig. 1].

The Nortrup reference does not teach the “assignment means for assigning, according to a predetermined operation by said operating unit, a function corresponding to one item selected by said selection means from the items in operation menu displayed on said display unit to one of said plurality of function keys; and control means for controlling, in response to the operation of said function key, said audio input means to execute processing corresponding to the function assigned to said function key by said assignment means”. However, the Darbee reference teaches the aforementioned assignment means and control means as follows:

- The claimed “assignment means for assigning, according to a predetermined operation by said operating unit, a function corresponding to one item selected by said selection means from the items in operation menu displayed on said display unit to one of said plurality of function keys” is met by the “DO” command macro, which can assign macros to certain function keys on the remote controller [col. 13, lines 13-17].
- The claimed “control means for controlling, in response to the operation of said function key, said audio input means to execute processing

corresponding to the function assigned to said function key by said assignment means" is met by the execution of the macro command upon actuation of the function key to carry out the pre-determined and assigned function [col. 13, lines 18-20].

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the assignment and control means for operating the definable function (macro) keys, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 15, the Nortrup reference meets the claimed "television receiver" as follows:

- The claimed "receiving means for receiving a television broadcast" is met by the RF Input 1 [Fig. 1].
- The claimed "image processing means for processing an image signal relating to the television broadcast received by said receiving means" is met by the IF& Demodulator 7, A/D converter 9 and other processing circuitry present in Figure 1.
- The claimed "audio processing means for processing an audio signal relating to the television broadcast received by said receiving means" is met by the Audio Processor 35 [Fig. 1].
- The claimed "display unit" is met by the television 27 [Fig. 1].

- The claimed “speaker for outputting sound corresponding to the audio signal processed by said audio processing” is met by the Speakers 45 and 47 [Fig. 1].
- The claimed “menu generation means for generating a menu image signal representing an operation menu having a plurality of menu portions at different hierarchical levels and relating to processing of the image signal and the audio signal” is met by On-Screen Character Generator 65 [Fig. 1], which serves to display a menu such as that found in 006 of Figure 4b, with selectable hierarchical structure in order to display more menus such as those in 013 of Figure 4d, 020 in Figure 4e, 026 in Figure 4g, etc., all for adjusting the operation and display of the image signal.
- The claimed “display control means for synthesizing a combined image signal by combining the image signal output from said image processing means and the menu image signal generated by said menu generation means, and for displaying an image corresponding to the combined image signal on said display unit” is met by the display of the function control instructions with the normal image for display together on the display device [col. 3, line 66 – col. 4, line 10].
- The claimed “instruction input means for receiving an instruction from a remote controller having an including of function keys and selection means for selecting a desired item in the operation menu displayed on said display unit” is met by the remote control receiver and demodulator

57 [Fig. 1], which serves to receive a selection by the user for on-screen functions through the use of keys on the remote control 55 [Fig. 1].

The Nortrup reference does not teach the “assignment means for assigning, according to a predetermined operation by said remote controller, a function according to one item selected by said selection means from items in the operation menu displayed on said display unit to one of said plurality of function keys; and control means for controlling, in response to the operation of said function key, said image processing means and said audio processing means to execute processing according to said function assigned to the function key by said assignment means”. However, the Darbee reference teaches the aforementioned assignment means and control means as follows:

- The claimed “assignment means for assigning, according to a predetermined operation by said remote controller, a function according to one item selected by said selection means from items in the operation menu displayed on said display unit to one of said plurality of function keys” is met by the “DO” command macro, which can assign macros to certain function keys on the remote controller [col. 13, lines 13-17].
- The claimed “control means for controlling, in response to the operation of said function key, said image processing means and said audio processing means to execute processing according to said function assigned to the function key by said assignment means” is met by the

execution of the macro command upon actuation of the function key to carry out the pre-determined and assigned function [col. 13, lines 18-20].

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the assignment and control means for operating the definable function (macro) keys, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 16, the Nortrup reference meets the claimed "image processing method" as follows:

- The claimed step of "inputting an image signal relating to a television broadcast" is met by the RF Input 1 [Fig. 1].
- The claimed step of "generating a menu image signal representing an operation menu relating to processing of the image signal and having a plurality of menu portions at different hierarchical levels each including at least one menu item" is met by On-Screen Character Generator 65 [Fig. 1], which serves to display a menu such as that found in 006 of Figure 4b, with selectable hierarchical structure in order to display more menus such as those in 013 of Figure 4d, 020 in Figure 4e, 026 in Figure 4g, etc., all for adjusting the operation and display of the image signal.
- The claimed step of "displaying on a display unit an image corresponding to the image signal obtained in said signal input step and the operation menu corresponding to the menu image signal generated in said menu

generation step" is met by the display of the function control instructions with the normal image for display together on the display device [col. 3, line 66 – col. 4, line 10].

- The claimed step of "receiving an instruction from an operating unit including a plurality of function keys and selection means for selecting a desired item in the operation menu displayed on the display unit" is met by the remote control receiver and demodulator 57 [Fig. 1], which serves to receive a selection by the user for on-screen functions through the use of keys on the remote control 55 [Fig. 1].

The Nortrup reference does not teach the steps of "assigning, according to a predetermined operation by the operating unit, a function corresponding to one item selected by said selection means from the items in the operation menu displayed on said display unit to one of the plurality of function keys; and controlling, in response to said operation of the function key, said signal input step to execute processing according to the function assigned to said function key in said assignment step".

However, the Darbee reference teaches the aforementioned assignment means and control means as follows:

- The claimed step of "assigning, according to a predetermined operation by the operating unit, a function corresponding to one item selected by said selection means from the items in the operation menu displayed on said display unit to one of the plurality of function keys" is met by the "DO"

command macro, which can assign macros to certain function keys on the remote controller [col. 13, lines 13-17].

- The claimed step of “controlling, in response to said operation of the function key, said signal input step to execute processing according to the function assigned to said function key in said assignment step” is met by the execution of the macro command upon actuation of the function key to carry out the pre-determined and assigned function [col. 13, lines 18-20].

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the assignment and control means for operating the definable function (macro) keys, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Regarding claim 17, the Nortrup reference meets the claimed “signal processing method” as follows:

- The claimed step of “inputting an image signal and an audio signal relating to a television broadcast” is met by the RF Input 1 [Fig. 1].
- The claimed step of “generating a menu image signal representing an operation menu relating to processing of the audio signal and having a plurality of menu portions at different hierarchical levels each including at least one menu item” is met by On-Screen Character Generator 65 [Fig. 1], which serves to display a menu such as that found in 006 of Figure 4b, with selectable hierarchical structure in order to display more menus such

as those in 013 of Figure 4d, 020 in Figure 4e, 026 in Figure 4g, etc., all for adjusting the operation and display of the image signal.

- The claimed step of “outputting, to an audio monitor, sound corresponding to the audio signal obtained in said signal input step” is met by the Audio Processor 35 and Speakers 45 and 47 [Fig. 1].
- The claimed step of “displaying on a display unit an image corresponding to the image signal obtained in said signal input step and the operation menu corresponding to the menu image signal generated in said menu generation step” is met by the display of the function control instructions with the normal image for display together on the display device [col. 3, line 66 – col. 4, line 10].
- The claimed step of “receiving an instruction from an operating unit including a plurality of function keys and selection means for selecting a desired item in the operation menu displayed on the display unit” is met by the remote control receiver and demodulator 57 [Fig. 1], which serves to receive a selection by the user for on-screen functions through the use of keys on the remote control 55 [Fig. 1].

The Nortrup reference does not teach the steps of “assigning, according to a predetermined operation by said operating unit, a function according to one item selected by said selection means from the items in operation menu displayed on said display unit to one of said plurality of function keys; and controlling, in response to the operation of the function key, said audio input step to execute processing corresponding

to the function assigned to said function key in said assignment step". However, the Darbee reference teaches the aforementioned assignment means and control means as follows:

- The claimed step of "assigning, according to a predetermined operation by said operating unit, a function according to one item selected by said selection means from the items in operation menu displayed on said display unit to one of said plurality of function keys" is met by the "DO" command macro, which can assign macros to certain function keys on the remote controller [col. 13, lines 13-17].
- The claimed step of "controlling, in response to the operation of the function key, said audio input step to execute processing corresponding to the function assigned to said function key in said assignment step" is met by the execution of the macro command upon actuation of the function key to carry out the pre-determined and assigned function [col. 13, lines 18-20].

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the assignment and control means for operating the definable function (macro) keys, in order to simplify the user task and perform the functions required of several buttons to achieve a specific function.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ikezaki (USPN 5,367,316) discloses a system for operating an OSD using a very simple Remote Control with soft-keys.

Wugofski (USPN 6,346,934) discloses a programmable remote control device that uses a macro assignment technique with a built in LCD.

Wehmeyer et al (USPN 5,781,247) disclose a customizable menu for display on the television for control of the video signal parameters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Shannon whose telephone number is (571) 272-7356. The examiner can normally be reached Monday through Friday 8:00 AM – 5:00PM, with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (571) 272-7353.

Any response to this action should be mailed to:

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501 Dulany Street
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(571) 272-2600.**

Michael R Shannon
Examiner
Art Unit 2614

Michael R Shannon
March 31, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600